

Identifying options for supporting the Off-Grid sector during COVID-19 crisis

Data presentation from High-Level Dialogue
16 April 2020

PROPRIETARY – SUSTAINABLE ENERGY FOR ALL
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Summary of survey findings

Off-grid perspective was developed with data from numerous companies and agencies. We surveyed over **80 Mini-Grid (MG) and Solar Home System (SHS) companies** serving more than **1.9 million customers** and **annual revenue of over \$160m**. We obtained data from **GONGLA, AMDA and Smart Power India**. And, we **interviewed more than a dozen Mini-Grid and Solar Home System companies** to further complement the data

Off-grid companies are focusing on protecting their businesses across four dimensions:

Securing people – **63% of SHS companies, and 44% of MG companies indicated some degree of concern on HR issues**. Companies are pursuing a range of activities to ensure their employees and their customers are safe, ranging from completely halting all installations through to a clearly structured “no contact install”. In addition, companies are moving employees to remote working models, with positive results, and doing whatever they can to ensure their employees continue to get paid.

Securing operations – **keeping existing systems running is top priority for many companies**. This necessitates having to be designated an “essential service”, and ensuring the supply chain and logistics. There are concerns across the supply chain, in particular with higher than normal complexity associated with importing goods and clearing customs.

Securing cash – **on average, off-grid companies expect to lose between 27% (SHS) and 40% (MG) of their revenues in the coming months**. As expected, cash positions are extremely tight, with ~70% of off-grid operations having two months or less OPEX available (67% for MG; 75% for SHS operators).

Securing growth – a range of different activities are being pursued by companies to ensure that they have a platform for growth in the future, including some **aggressive short term activities to even drive growth during the crisis itself**.

We received input from 3 main sources

1 Survey



82
Companies



1.9m+
Connections



\$160m+
revenue



6200+
staff

2 Data from other bodies



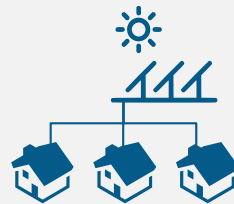
SmartPowerIndia

G O G L A

The Voice of the Off-Grid Solar Energy Industry



3 Live interviews



9 Mini-grid interviews



4 Solar Home System interviews

We surveyed a wide range of respondents



of companies represented

30

52



Connections

~60k+

1.8m+



Annual Revenue

\$10m+

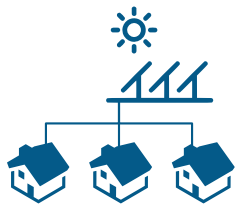
~\$150m



Members of staff

500+

5,700+



Survey respondents represent a total of...

30
of companies represented

~60k+
Connections

\$10m+
Annual Revenue

500+
Members of staff

MG Surveys covered operators serving over 700k connections in Africa and Asia

Respondents by...

Location

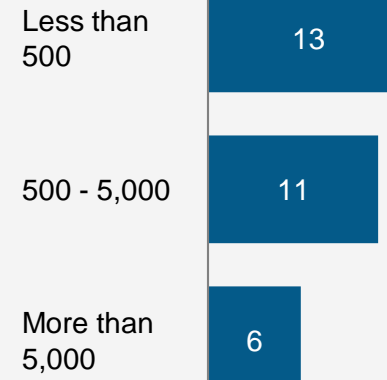
Africa



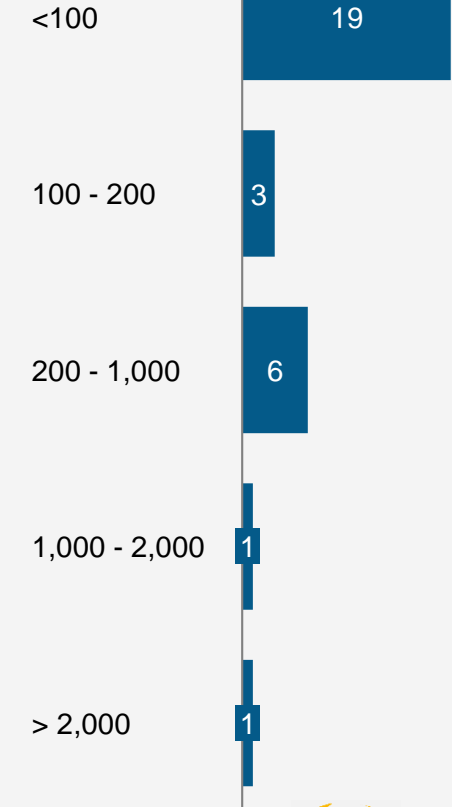
Asia



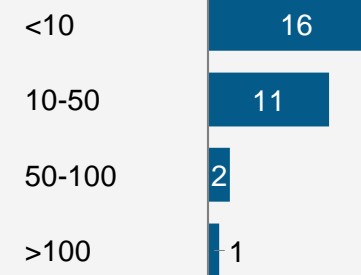
Customer reach, #



Annual revenue, \$'000



Staff strength, #





Survey respondents represent a total of...



52

of companies represented



1.8m+

Connections



\$150m+

Annual Revenue



5,700+

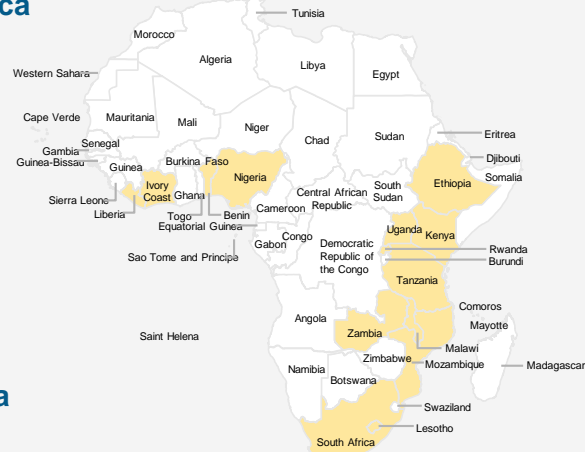
Members of staff

SHS Surveys covered operators serving over 1.8m connections in Africa and Asia

Respondents by...

Location

Africa



Asia



Customer reach, #

Less than 1,000

22

1,000 - 10,000

14

More than 10,000

16

Annual revenue, \$'000

<100

25

100 - 200

4

200 - 1,000

8

1,000 - 2,000

4

> 2,000

11

Staff strength, #

<10

16

10-50

14

50-100

10

>100

12



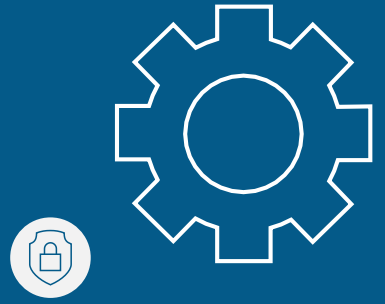
We've categorized feedback from interviews and surveys across four dimensions

1



Securing People

2



Securing Operations

3



Securing Cash

4



Securing Growth

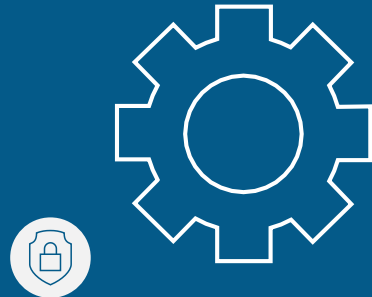
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Securing Growth

Off-grid company primary people concerns are centred on protecting employment and health status of employees and customers

What are companies doing?

- Moving all eligible functions remote (e.g. call centre)
- Minimising field sales interactions in countries not under government lockdown to avoid being disease vectors
- Establishing and enforcing safety guidelines and tools (e.g. hand sanitizers, masks, social distancing)

Potential areas of support

- Communication channel for constantly updated best practices on COVID-19 precautions and staff protection

Protecting staff and customers from the virus

- Prioritising staff retention support with current and expected cashflow

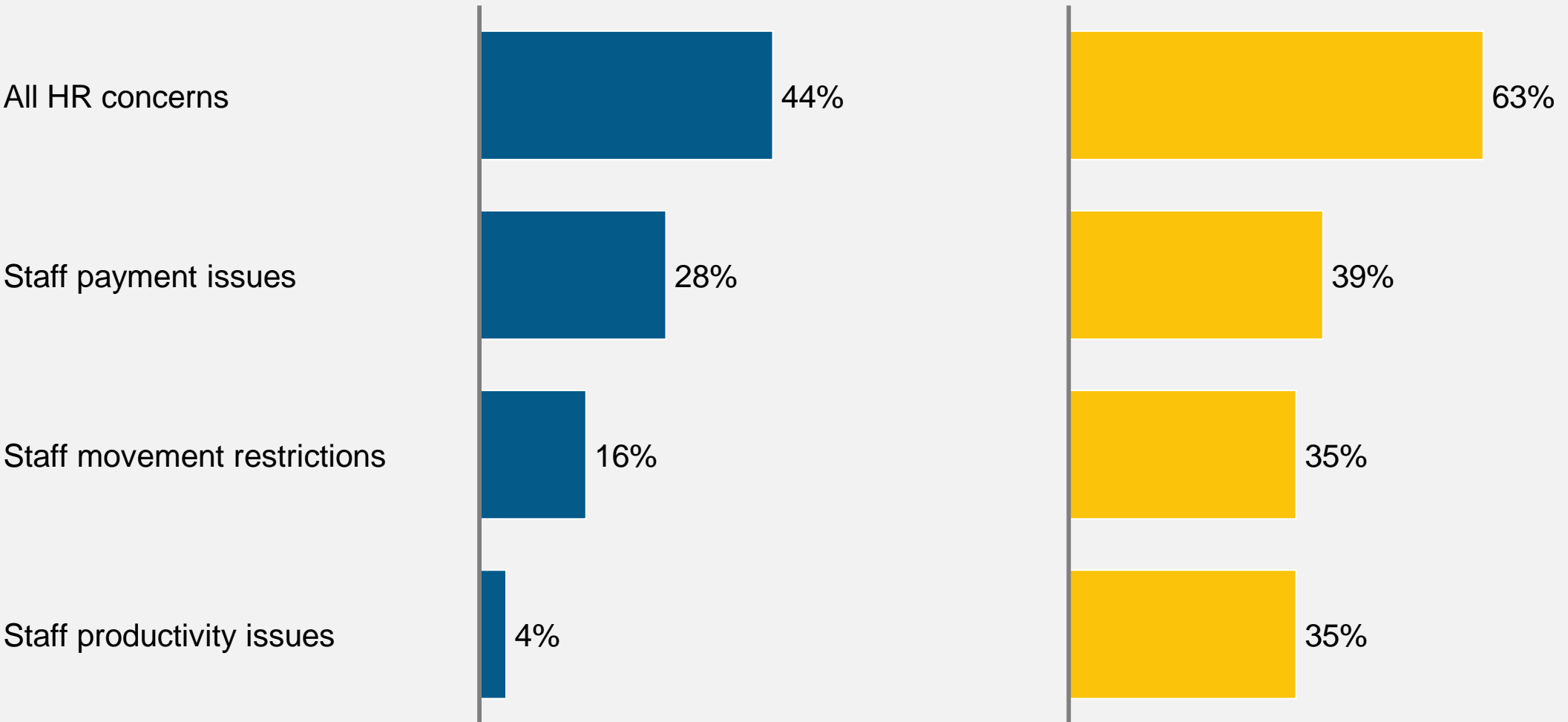
- Flexible funding support mechanism enabling off-grid companies keep essential staff

Keeping staff employed

~45 – 60% Survey respondents also highlighted compensation and productivity as core concerns

MG HR challenges,
% of respondents

SHS HR challenges,
% of respondents



Compensation, Retention, Safety and Productivity themes emerge from interviews and survey



1 Staff compensation and retention

- “ ” We’re ok for another month or two in covering our expenses, after that, we need to look at layoffs.*
- “ ” Company staff are working from home and cost of internet and electricity for each of them is high*
- “ ” We expect to experience difficulty with staff payment in the medium term and likely won’t renew contractors’ jobs*

- “ ” The largest risk posed beyond revenue loss, is that commissioned sales teams will abandon us for other forms of employment*
- “ ” Management may be forced to lay-off some staff as the company can no longer manage to support their activities*
- “ ” While we are doing everything we can to avoid letting any of our staff go during this temporary strain on our business, our sales agents’ income levels will decrease substantially as sales decrease*

2 Staff safety

- “ ” We were prepared for the impact as early as late March and have been providing PPE for staff, closing offices, and providing appropriate social distancing training*

- “ ” We have laid down staff safety procedures and provided all the right kits...it will be difficult to monitor their adherence though*
- “ ” We just issued our safety guidelines last week.... I’m not that optimistic that these will be followed, but we’ll do our best.*

3 Staff productivity

- “ ” Our business depends on our agents’ ability to physically move around, both to bring products to end customers and to collect regular payments from customers.*

- “ ” Extended periods of working from home are expected to trigger increases in employee stress levels and decreases in productivity*

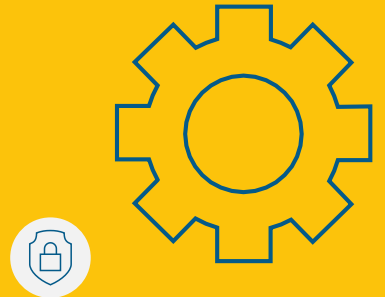
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Securing Growth

Supply chain, remote operations and essential service designation are top of mind concerns for off-grid energy companies

What are companies doing?

Potential areas of support

Designation as an essential service

- Engaging government officials to ensure essential service designation of off-grid energy provision

- Advocacy support with governments to clearly designate off-grid energy companies as essential services

Planning for continued operations

- Adapting operations to fit country situation and lockdown intensity (e.g. operations halt in Uganda as opposed to slowdown in Kenya)
- Increased focus on supporting existing customers vs. new connections

Securing supply chain

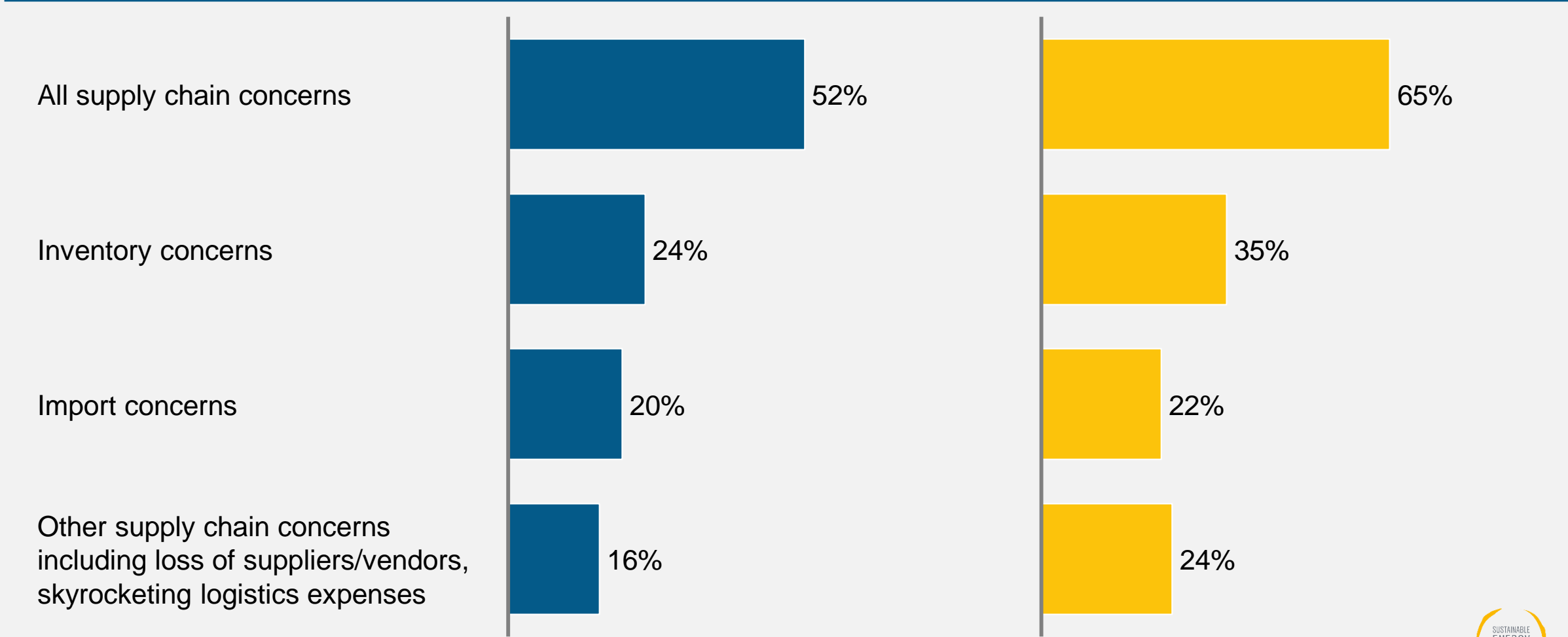
- Working with local suppliers/distributors to reduce supply concerns
- Expanding supplier base reduce exposure to single supplier

- Advocacy support to facilitate goods clearing and ease other import challenges
- Invest upstream in the supply chain to ensure minimal disruption

Survey respondents also highlighted Imports, inventory and other supply chain disruptions as core challenges

MG supply chain challenges,
% of respondents

SHS supply chain challenges,
% of respondents





1 Import difficulties



Spare parts and support activity has been suspended due to our inability to ship in spare parts and poor access to sea port and airports



We are unable to clear our latest consignment of SHS from the ports in Nigeria, making it difficult for us to meet up with supply as we run down on inventory



All modes of product transportation have either been closed or are highly restricted to essential supplies such as drugs

2 Supply chain and service provision issues



The major challenge has been inventory management. Our utility managers have been unable to oversee the mini-grid operations properly due to the state lockdown



Various states have their borders closed making transportation almost impossible and very expensive



Before lock down, we virtualized all of our call centers. In general trouble shooting can be done over the phone.

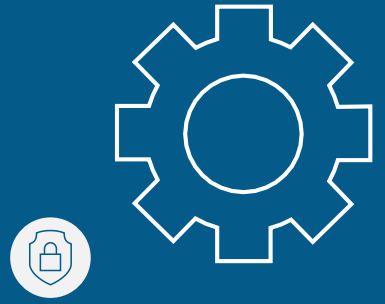
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Securing Growth

Revenue, OPEX and debt repayment issues lead top financial concerns of off-grid energy operators

What are companies doing?

Maintaining revenue

- Generating payment plans for customer to minimize default
- Active credit management (e.g., bringing on incremental credit professionals during the crisis)

Managing OPEX

- Revising processes to ensure lean/cost effective operations across board
- Negotiating with suppliers (payables) for potential extensions to improve cash flow
- Ramp up of social media marketing to reduce cost of customer acquisition

Ensuring debt repayment

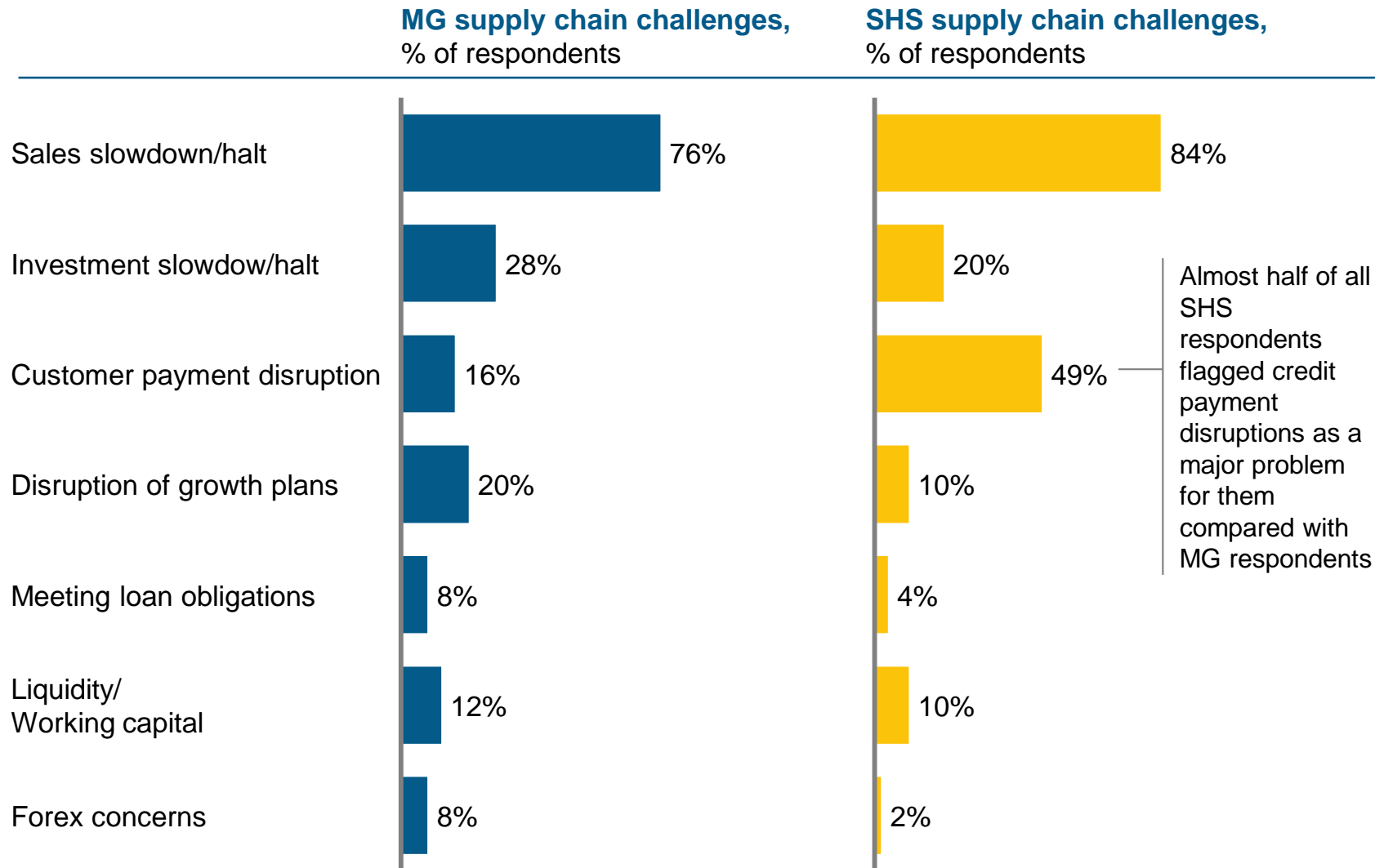
- Explicit negotiation happening with lenders for loan refinancing / delay in payments

Potential areas of support

- Specialised **funding mechanism** for off-grid energy companies (primarily SHS) that:
 - **Provides flexibility** for off-grid companies to focus on their key drivers of value
 - Can be deployed **quickly enough to enable a preventive vs. reaction approach**
 - Will **not discourage investor input** post COVID-19 crisis
 - Will not **alter customer attitude towards payments** post crisis

- Encourage or support lenders to **relax or restructure debt repayment obligations** during crisis period (including potential coverage of interest payments)

MG and SHS companies surveyed are primarily concerned about COVID's impact on their sales & other financial challenges



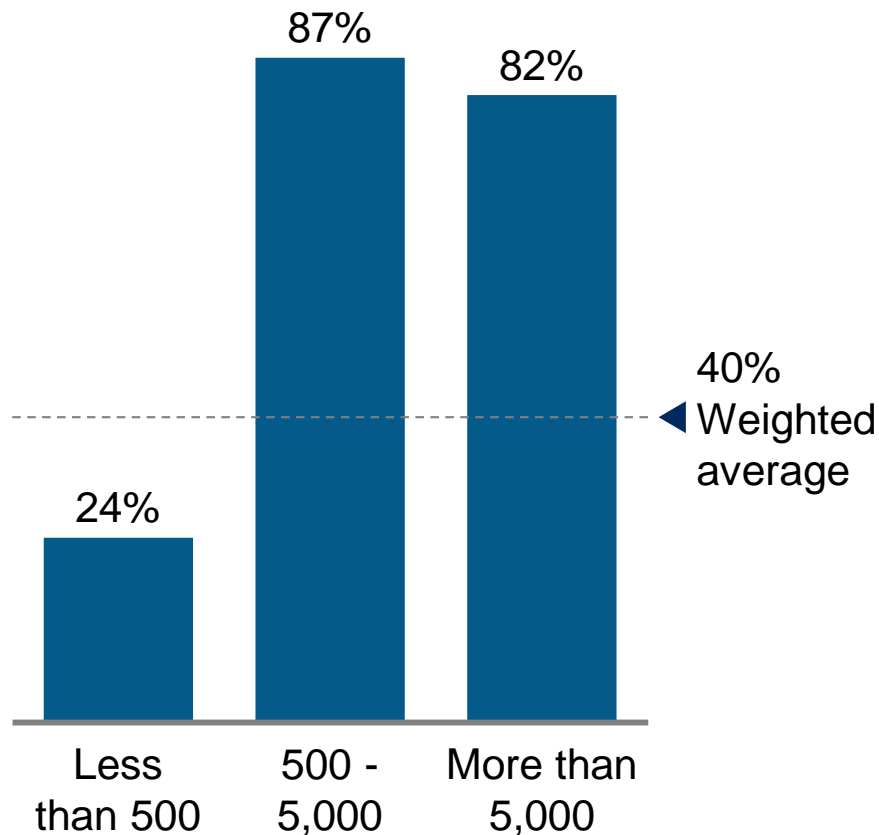
“ ” If our agents are unable to continue moving around, due to the enforced restricted movement, customer may be unable to pay even if they have funds
- African SHS operator

“ ” In panic, customers rightfully prioritized stocking food and supplies over electricity
- Asian MG operator

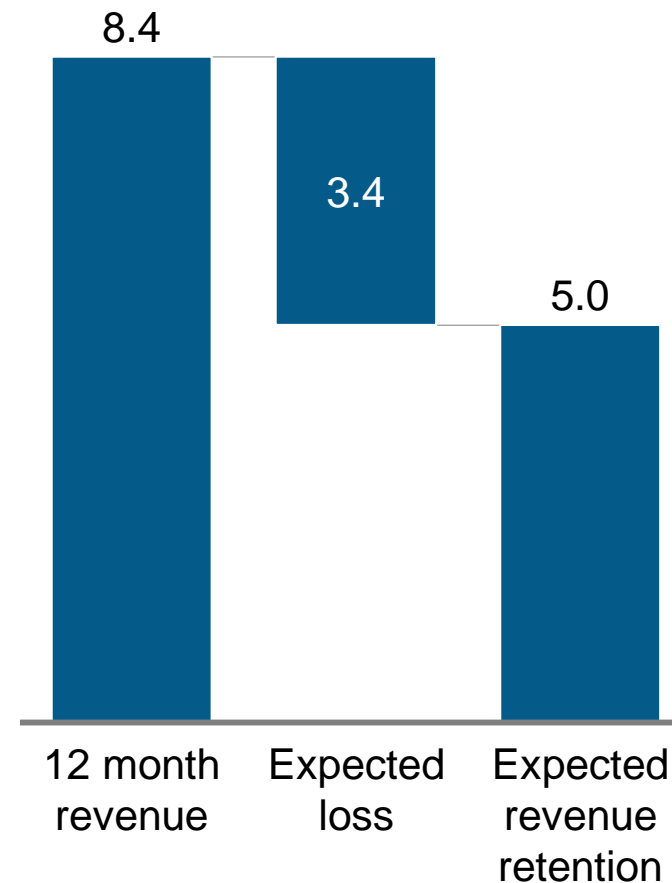
“ ” In full gear, we can do a “no contact installation” with the customer. They have to sign off and agree that they will not be there, and we’ve got a process for the money transfer.
- Asian SHS operator

MG companies surveyed currently expect to lose 40% of their revenues on average due to COVID-19 crisis

Projected revenue loss by number of connections, % revenue loss



21 of 30 respondents provided revenue projections¹, \$m



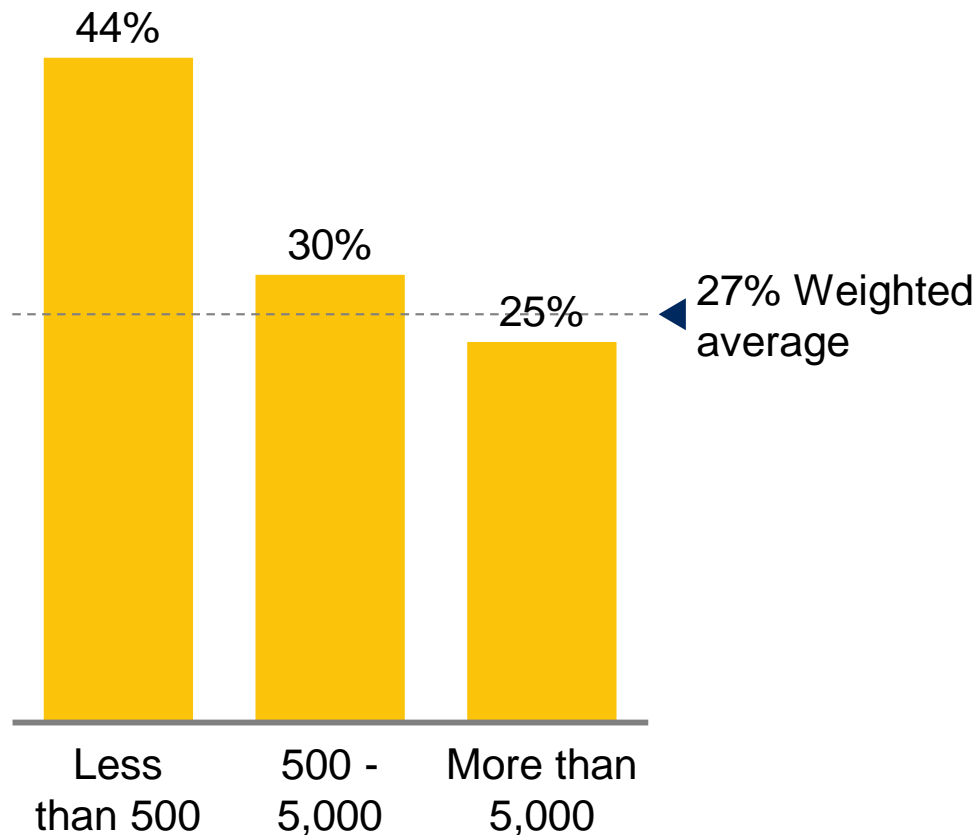
“ ” Income of our customers have dwindled as they are majorly farmers and traders, they are not able to sell to neighboring community due to movement restrictions
- African MG operator

“ ” We’re expecting a loss in revenue when the markets are all closed post-harvest season and people can’t sell their products to generate income
- MG operator

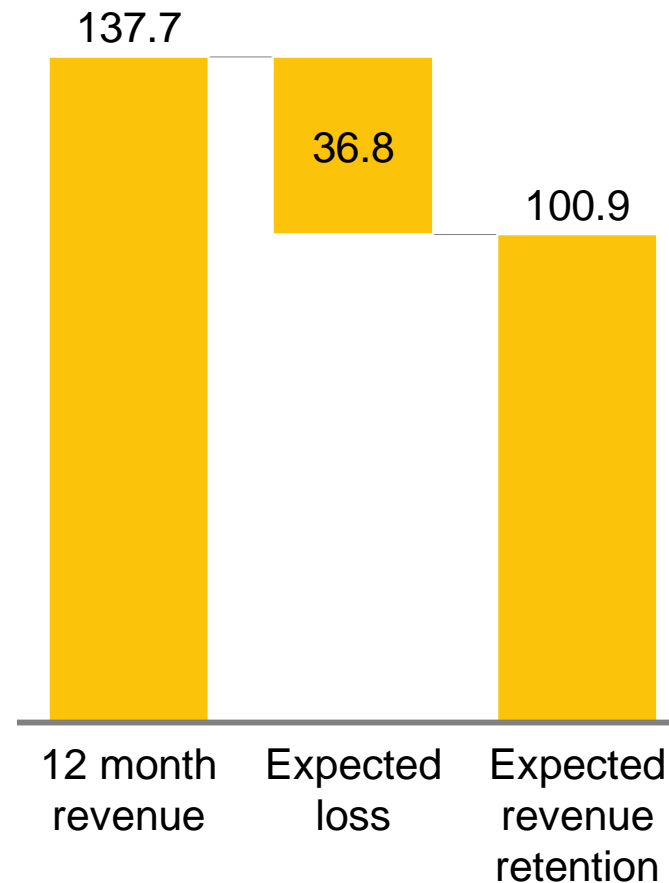
1. Includes 18 respondents across Africa and 3 Asian respondents

SHS companies surveyed currently expect to lose 27% of their revenues on average due to COVID-19 crisis

Projected revenue loss by number of connections, % revenue loss



33 of 52 respondents provided revenue projections¹, \$m



“ We are seeing a short term blip where utilization goes up, but we are expecting to see perhaps a 50% drop over the next 3-6 months in terms of revenues as people don't have the revenues.

- African SHS operator

“ We are worried in the longer run about portfolio health. The livelihoods of our existing customers has been restricted, and this affects their long term ability to pay.

- African SHS operator

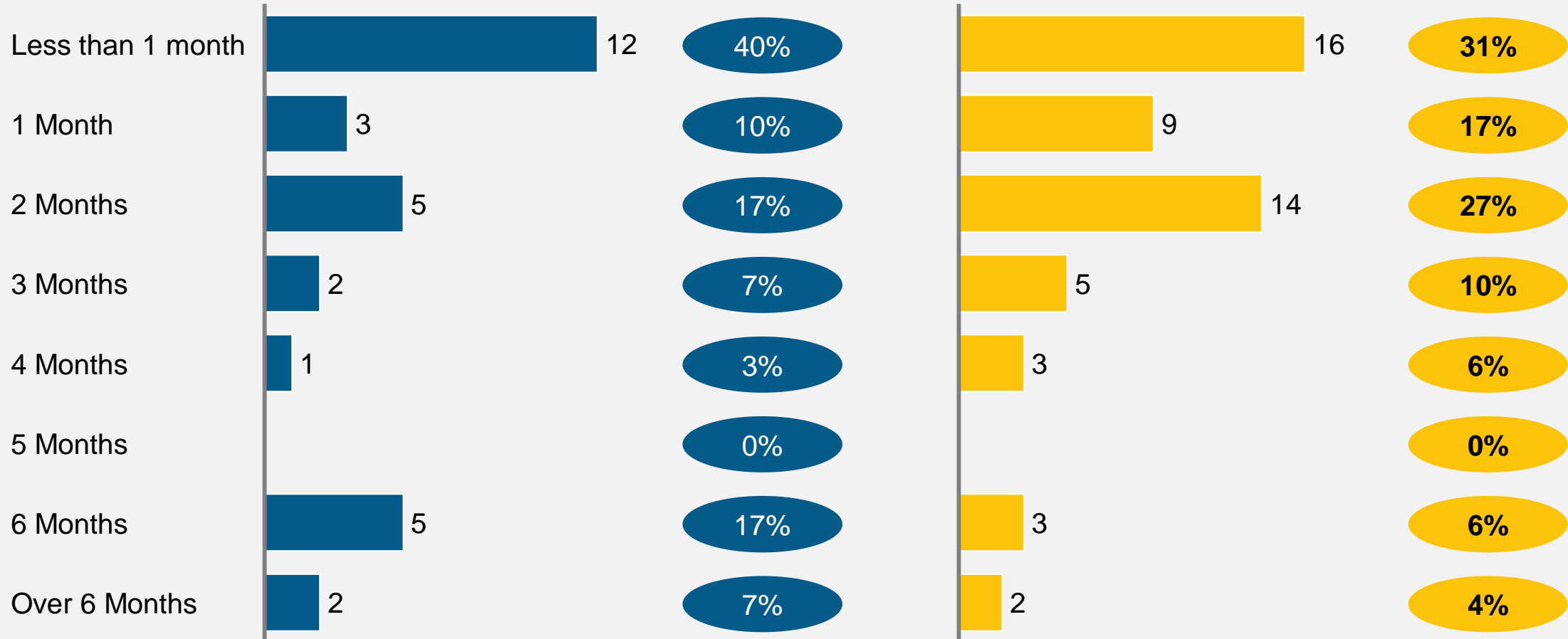
1. Includes 27 respondents across Africa, 3 Asian respondents and one from Oceania

67 - 75% of surveyed companies have two months or less of OPEX available

X% % of total

MG OPEX coverage, #

SHS OPEX coverage, #



67% of surveyed MG companies have less than 2 months OPEX available

MG OPEX availability by customer reach, # respondents

	Less than 500	500 - 5,000	More than 5,000	Grand Total	%
Less than 1 month	6	3	3	12	40%
1 Month		3		3	10%
2 Months	1	3	1	5	17%
3 Months		1	1	2	7%
4 Months			1	1	3%
5 Months				0	0%
6 Months	4	1		5	17%
Over 6 Months	2			2	7%

Half all MG respondents have 1 month or less available OPEX

Only one of the mid-sized MG operators and no large operator had OPEX availability for more than 4 months

75% of surveyed SHS companies have less than 2 months OPEX available

SHS OPEX availability distribution by customer reach, # respondents

	Less than 1,000	1,000 - 10,000	More than 10,000	Grand Total	%
Less than 1 month	5	5	6	16	31%
1 Month	6	3		9	17%
2 Months	1	7	6	14	27%
3 Months	1	2	2	5	10%
4 Months		1	2	3	6%
5 Months				0	0%
6 Months		3		3	6%
Over 6 Months	1	1		2	4%

“ ” The other thing we are doing is restructuring all of our debt with our lenders. We have about 3 months, if we don't have to pay off the debt... any help that can be gotten to convince lenders the restructure... but not all of the lenders have been so willing.

- Asian SHS operator

“ ” All VC has dried up. Some concessional finance / debt finance will be really critical

- African SHS operator

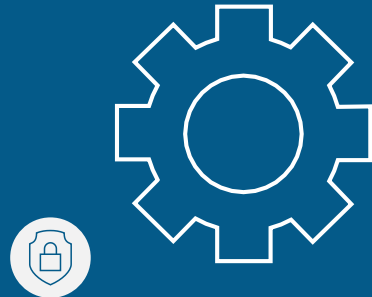
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Securing Growth

What are companies doing?

Growth during crisis

- Shift to B2B sales (e.g. sales to companies equipping workers for remote work)
- Ramp up of social media marketing to maintain customer awareness and demand
- Some companies are exploring providing free power to essential service (e.g., clinics, powering water supply in periods of excess power, etc.)

Potential areas of support

- Support mechanism to maintain key infrastructure projects already underway

Growth post crisis

- Adjusting supply chain for more flexibility and stability for future growth e.g. local distributors

- Provision of working capital facility to enable investment for growth moving forward
- Shifting RBF facilities to allow for some up front payment (e.g., NEP in Nigeria)

Overall we see 2 key themes from interviews and survey on securing growth

4



Securing Growth



1 Declining investment



It's difficult attracting new investment and clients



We run the risk of having investors getting burned by an off-grid company investment and shunning the industry as a whole as a result

2 Reduced runway for growth



Everything is on hold and we don't know when things will resume



As a nascent startup on the cusp of ramping up, everything is at standstill. Ours is a field sales model, so sales have reduced to zero



If investors get cold feet and we can't do projects... that sucks



Our already limited distribution has come to a complete halt and we have not recorded any new customers



There is an opportunity for distributed renewables to help solve this problem. We've got a product family that can solve this problem right now.

Summary of survey findings

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